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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/508,790

09/24/2004

Henry Franke

32860-000782/US

9854

30596 7590 06/04/2007
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EXAMINER

LEJA, RONALD W

ART UNIT

PAPER NUMBER

2836

MAIL DATE

DELIVERY MODE

06/04/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/508,790

Applicant(s)

FRANKE ET AL.

Examiner

Ronald W. Leja

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

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The following rejections have been maintained from the Office Action of 11/29/2006.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 9, 10 and 17 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Demeyer et al. (4,380,785).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 3-8 and 11-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Demeyer et al..

Claims 3, 5, 11 and 13 are drawn to a capacitor and/or means that is chargeable by turning off the semiconductor switch for a short period of time so as to provide control current to keep the semiconductor switch maintained on. Figure 2 of the Reference discloses the use of a capacitor being connected in series with a transistor (54) and the base connection of the semiconductor switch (56), but is somewhat silent with respect to its operation. An auxiliary control device (90) is disclosed as preventing inadvertent tripping upon application of initial power. Therefore, it is the opinion of the Examiner that it would have been obvious to ensure series capacitor of Figure 2 gets charged as needed to help ensure the semiconductor switch (56) is maintained on, thereby leading to a more reliable trip circuit. Claims 4, 6-8, 12 and 14-16 appear to limit the tripping in response to a "short-circuit" only. Demeyer et al. disclose tripping for a short-circuited condition as well as for other types of fault conditions (i.e. ground fault). However, it would have been obvious to limit the tripping to a short-circuit condition only, dismissing the decreased level of protection being offered to a load, as a means to offer a more compact and cheaper (due to less components needed) protection design to particular applications. Short-circuit protection also offers protection to the power source.

Applicant's arguments filed 2/28/2007 have been fully considered but they are not persuasive. Applicant makes issue with the Office Action of 11/29/2006 as not having "element-by-element" analysis, and therefore, is considered to be incomplete. The Examiner is unaware of any requirement for an "element-by-element" analysis. In fact, the 35 USC 102 (b) rejection above, was considered to be "clearly anticipated", thereby not requiring any further clarifying statements. Applicant's instant remarks indicate that Applicant interpreted the same elements as the Examiner had intended

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and as clearly found in the figures of the Reference. However, the Examiner disagrees with Applicant's statement that the Reference only shows a series connection between the trip coil (22), current supply and switch (52). The instant claims essentially require (see Applicant's Fig. 2) that the controllable power semiconductor switch (12) be connected in parallel with the current supply formed by the rectifier circuit (9-11) and in parallel with the tripping magnet (5). Applicant refers to this Figure 2 in the instant Response for support. The Examiner does not see any real difference between Applicant's Figure 2 and Figure 1 of Demeyer et al., in the sense that one is in "parallel" and the other is in "series". In fact, because of resistor (14), Applicant's current supply formed by the rectifier circuit (9-11) is not technically in parallel with either switch (12) or tripping magnet (5), and so any additional components found in Figure 1 of Demeyer et al., i.e. (66) & (62), does not take away from Applicant's interpretation of being "connected in parallel" as required in the claim language.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

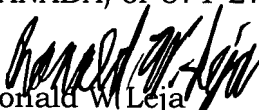
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronald W. Leja whose telephone number is (571)272-2053. The examiner can normally be reached on Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Sherry can be reached on (571)272-2800. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Ronald W. Leja
Primary Examiner
Art Unit 2836

rw1
May 27, 2007

5/27/07